Question 5

Which of the following best explains the difference between BOD readings at Hawthorn and Docklands?

A The river is much wider at Docklands than at Hawthorn.
B The river is flushed with seawater twice a day at Docklands, but not at Hawthorn.
C The people developing the new housing at Docklands have 'cleaned up' the river there.
D The boats coming into the docks carry clean ballast water that they empty into the river at Docklands.

Questions 6, 7 and 8 relate to the following information.

A Biology student took two plants, A and B, with hairy leaves. Both plants had grown in pots of identical potting mix and both were watered fully at the start of the experiment. The student carefully scraped the hairs from the leaves of plant A and then weighed each plant in its pot. She put both plants in a glass enclosure where they would receive constant light from a lamp and the same conditions of temperature and humidity. The plants remained in the enclosure for three days, during which time no additional water was given to either plant. The plants in their pots were weighed again at the end of the third day. The results are given below.

	Initial weight (g)	Final weight (g)
Plant A	315.6	299.7
Plant B	306.5	300.1

Question 6

The control in this experiment was:

A the lack of watering
B the identical potting mix
C the unshaven plant
D the constant light

Question 7

This experiment could have been improved if the student had:

A used a third plant with only some of its leaves shaved
B placed experimental plants outside in natural conditions for the three days
C added a measured amount of water to each plant on every day of the experiment
D had several plants in 'shaved' and 'unshaved' groups

Question 8

The conclusion that the student drew from this experiment is probably that:

A hairs on plant leaves increase the rate of water loss
B hairs on plant leaves decrease the rate of water loss
C hairs on plant leaves have no effect on the rate of water loss
D there is insufficient information to draw any valid conclusion

Question 9

In the late afternoon of a sunny summer day a student noticed that all the sunflowers in a paddock were facing away from the road. The student correctly decided that the most likely explanation for this observation was that:

A the flowers were facing south as a response to gibberellins
B the flowers were facing north in response to the drought
C the flowers were facing east in response to auxins
D the flowers were facing west in response to positive tropism